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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,988	01/13/2004	Kenneth R. Cornwall	Cornwall 4.1-30	2256
21036	7590	03/16/2006	EXAMINER	
MCLEOD & MOYNE, P.C. 2190 COMMONS PARKWAY OKEMOS, MI 48864			HUYNH, KHOA D	
			ART UNIT	PAPER NUMBER
			3751	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,988

Applicant(s)

CORNWALL, KENNETH R.

Examiner

Khoa D. Huynh

Art Unit

3751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-11, 13-15 and 18-27 is/are pending in the application.
- 4a) Of the above claim(s) 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-11, 13-15, 18 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Leary (2127184) in view of Johnston (5149366).

Regarding claims 1, 7 and 8, the O'Leary reference discloses a waste drainage system. The system includes a stack (2) having opposed ends, and a branch pipe (22) connected to the stack at a point space between the ends of the stack, and a fixture (W) connected to the branch pipe. The system also includes an air admittance valve (10) connected to the branch pipe at a point between the stack and the fixture. The valve opens to allow air to enter the system and to equalize the pressure in the system (page 1, lines 30-55; page 2, lines 1-7).

The O'Leary reference DIFFERS in that it does not specifically include a relief vent as claimed. Attention, however, is directed to the Johnston reference which discloses a drainage system having a pressure relief valve (Fig. 5) to equalize pressure in the drainage system. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the O'Leary reference by employing a pressure relief valve, in view of the teaching Johnston, in order to allow the overpressure gas in the

drainage system to vent into air outside of and surrounding the relief vent to equalize pressure in the drainage system. Furthermore, such modification would also be considered a mere choice of an additional valve mechanism to preferably enhance the performance of the drainage system on the basis of its suitability for the intended use especially since the use of both an air admittance valve and an pressure relief valve, and their specific location and arrangement with respect to each other, in a drainage system is generally known in the drainage system art (see cited US 5419366 and US 2004/0261870 references and the cited Uniform Plumbing Code document as evidence for the teaching of using both the air admittance valve and the pressure relief valve in a drainage system).

Regarding claim 9, the modified O'Leary reference DIFFERS in that it does not specifically disclose that the stack has a height of at least 480 inches as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ such height for the stack since discovering an optimum value for the height of a stack of a result effective variable involves only routine skill in the art especially since it is known that the maximum height of the stack is 50 feet (see the cited Uniform Plumbing Code document).

Claims 10 and 18 recite limitations that are similar to the limitations of claims 1, 7-9 which have been rejected as discussed supra.

3. Claims 2-4 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified O'Leary (as discussed above) in view of Cornwall (6795987).

Regarding claim 2, the modified O'Leary reference DIFFERS in that it does not specifically disclose that the relief vent has a flexible valve member as claimed. Attention, however, is directed to the Cornwall reference which discloses a drainage system having a valve (10) with a flexible member (about 16, 16C, 16B). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the modified O'Leary reference by employing a valve having a flexile member in view of the teaching Cornwall. Such modification would be considered a mere choice of a preferred vent valve on the basis of its suitability for the intended use especially since applicant also admitted that the vent valve can be of any type of valve well known in the art (specification, page 6, paragraph [0020]).

Regarding claim 3, the (flexible) valve member has a first end (about 12) and a second end (about 16B), wherein in a normal position, the second end of the valve member is closed (Fig. 2 of Cornwall).

Regarding claim 4, the (flexible) valve member has a first end (about 12) and a second end (about 16B) with a flexible side wall extending therebetween forming an inner passageway that is, in a normal position, tapered in cross-section from the first end toward the second end. The flexible side wall adjacent the second end is curled. When air is entered the inner passageway, the flexible sidewall is uncurled to allow air to exit the second end.

Claims 13-15 recite limitations that are similar to the limitations of claims 2-4 which have been rejected as discussed supra.

4. Claims 11 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified O'Leary (as discussed above) in view of Luff et al. (1830517).

Regarding claim 11, the modified O'Leary reference DIFFERS in that it does not specifically include a connector pipe as claimed. Attention, however, is directed to the Luff et al. reference which discloses a combination fitting having a connector pipe (Fig. 1) for combining two separate inlet sources into a single outlet source. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the modified O'Leary reference by employing a connector pipe in view of the teaching of Luff et al. Such modification would be considered a mere choice of a preferred mounting arrangement for the relief vent and the air admittance valve on the basis of its suitability for the intended use.

Regarding claim 25, the pipe connector is a Y-connector.

Claims 26 and 27 recite limitations that are similar to the limitations of claims 11 and 25 which have been rejected as discussed supra.

Response to Amendment

5. Applicant's amendment, filed on 01/06/06, to the pending claims is insufficient to distinguish the claimed invention from the cited prior art or overcome the rejections as discussed above.

Response to Arguments

6. Applicant's arguments filed on 01/06/06 with respect to the pending claims have been fully considered. However, they are deemed not persuasive.

In response to applicant's arguments against the references, i.e. O'Leary and Swaffield et al. individually (in the remarks section, page 19, paragraph 4), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant also asserts that the O'Leary and Swaffield et al. do not teach the amended limitations that is "the relief vent opens to allow gas from the drainage system to exit the through the vent into air outside of and surrounding the vent". See remarks section, page 19.

Nevertheless, such assertions are now moot in view of the new grounds of rejections under 35 U.S.C. 103(a) as being unpatentable over O'Leary (2127184) in view of Johnston (5149366) and as discussed above.

Conclusion

7. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

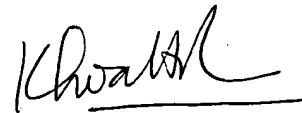
Art Unit: 3751

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoa D. Huynh whose telephone number is (571) 272-4888. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Khoa D. Huynh
Primary Examiner
Art Unit 3751

HK
03/13/2006